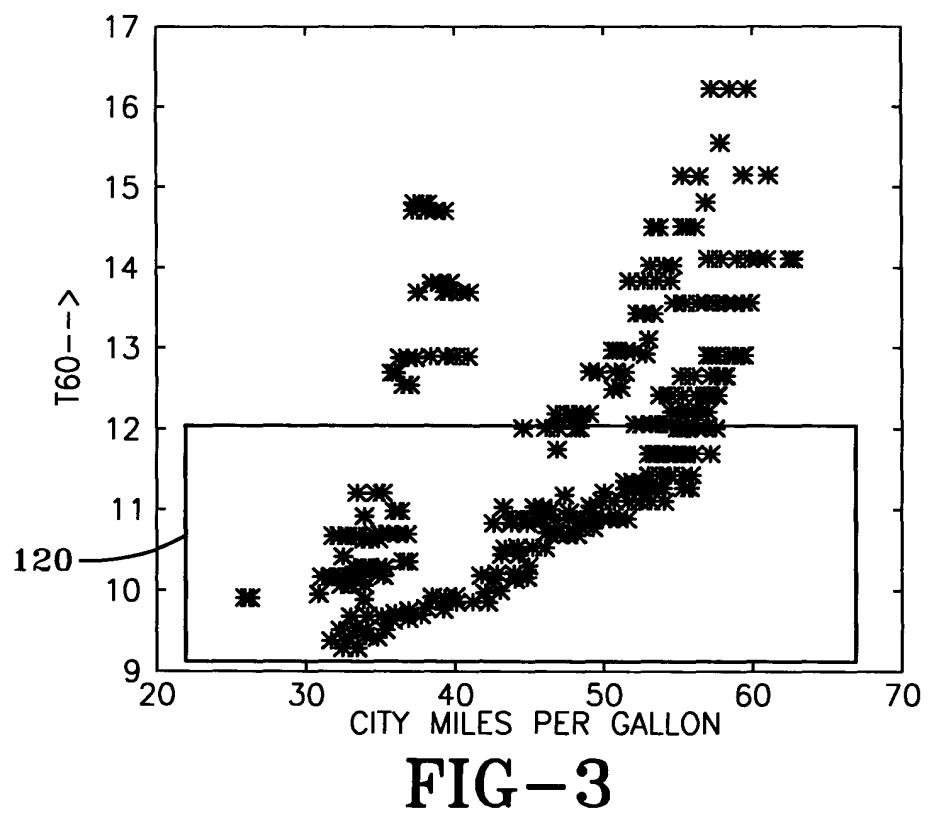
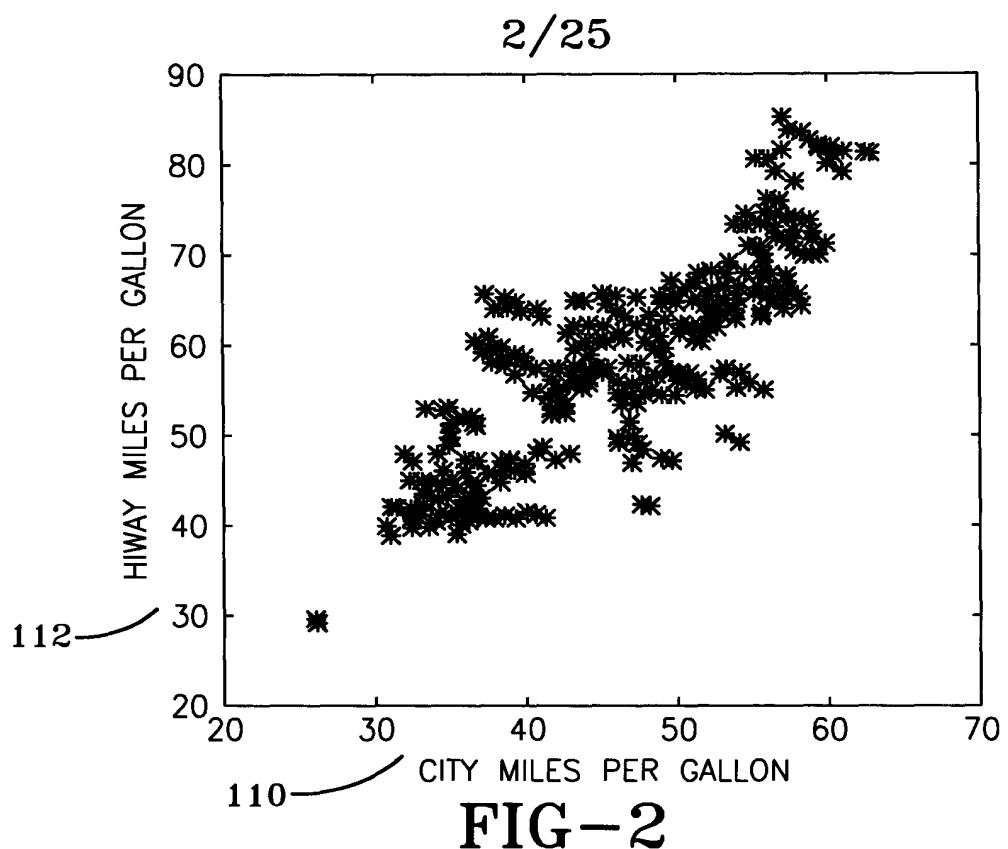


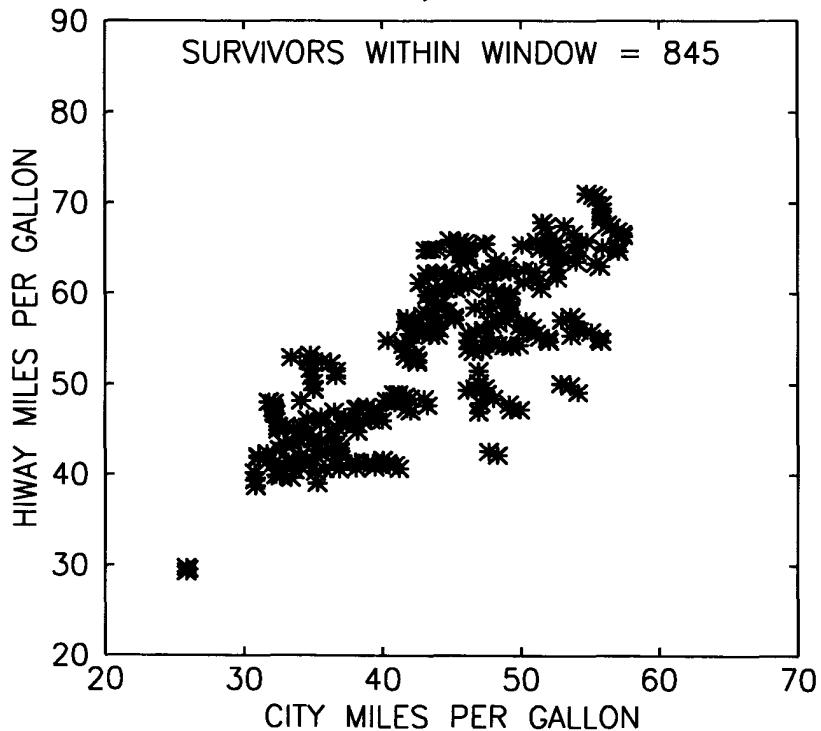
FIG-1

REPLACEMENT SHEET

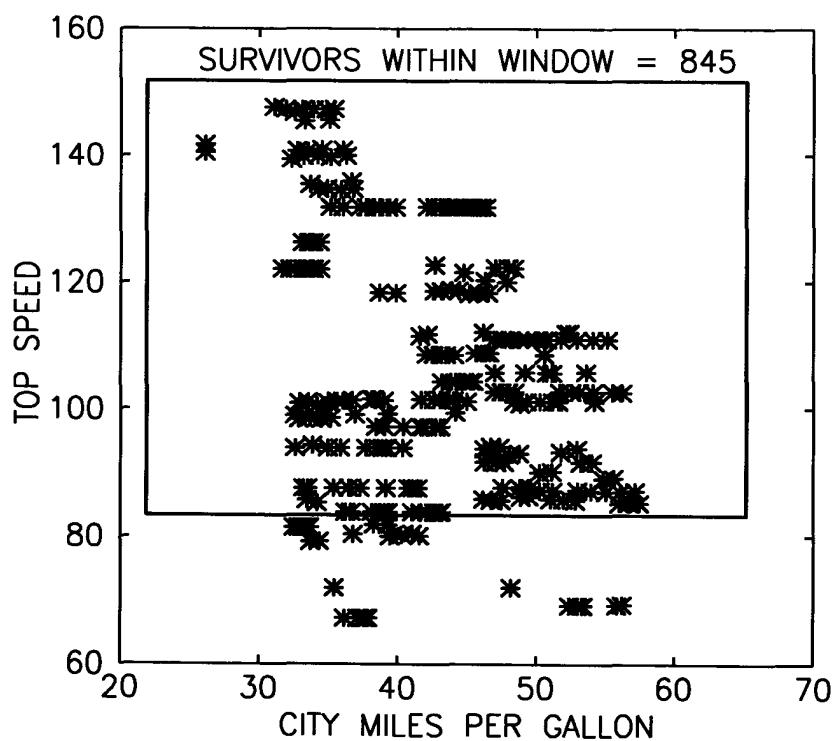


REPLACEMENT SHEET

3/25



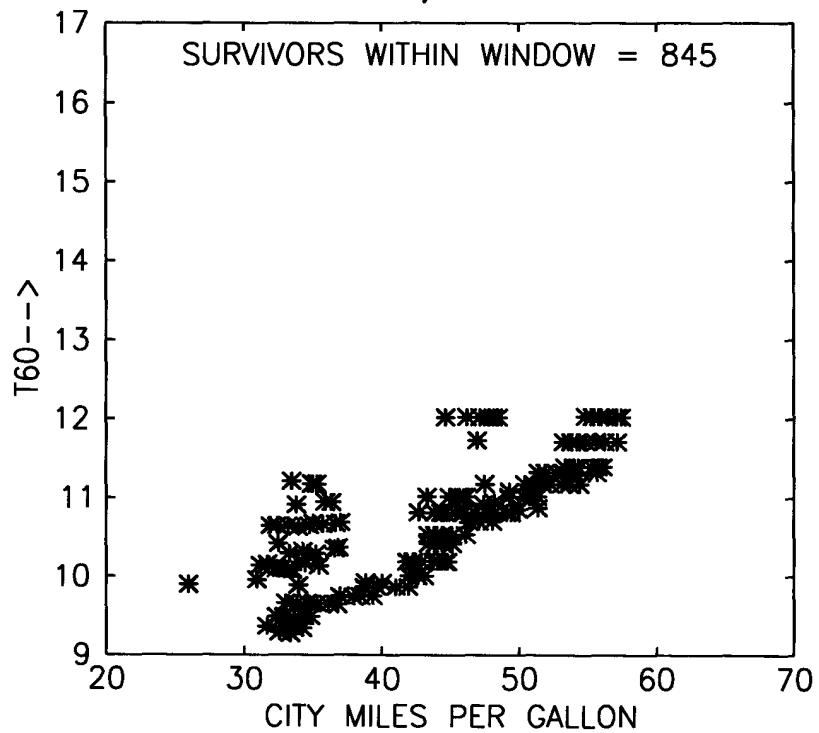
**FIG-4A**



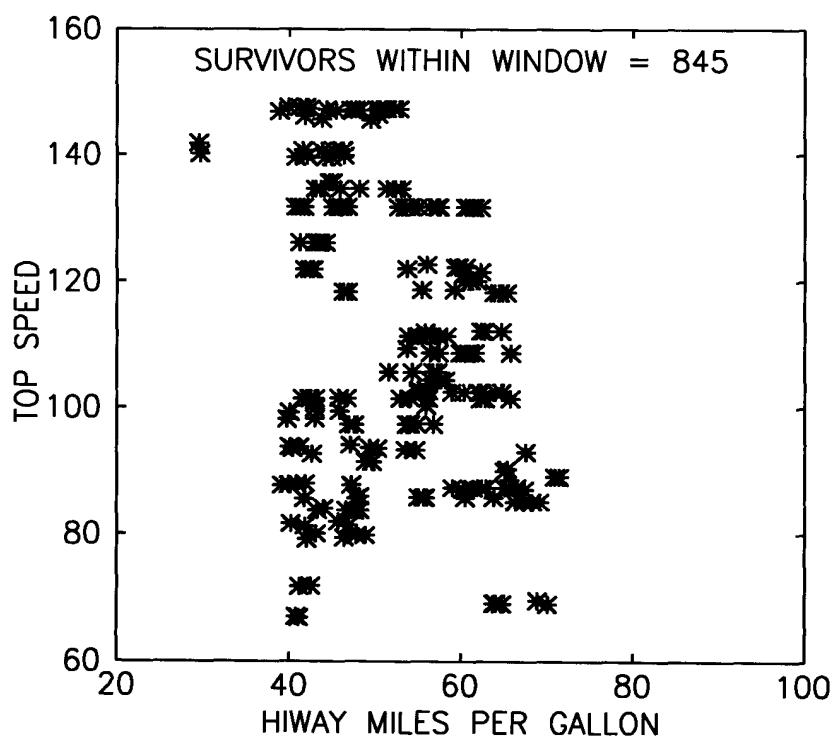
**FIG-4B**

REPLACEMENT SHEET

4/25



**FIG-4C**



**FIG-4D**

REPLACEMENT SHEET

5/25

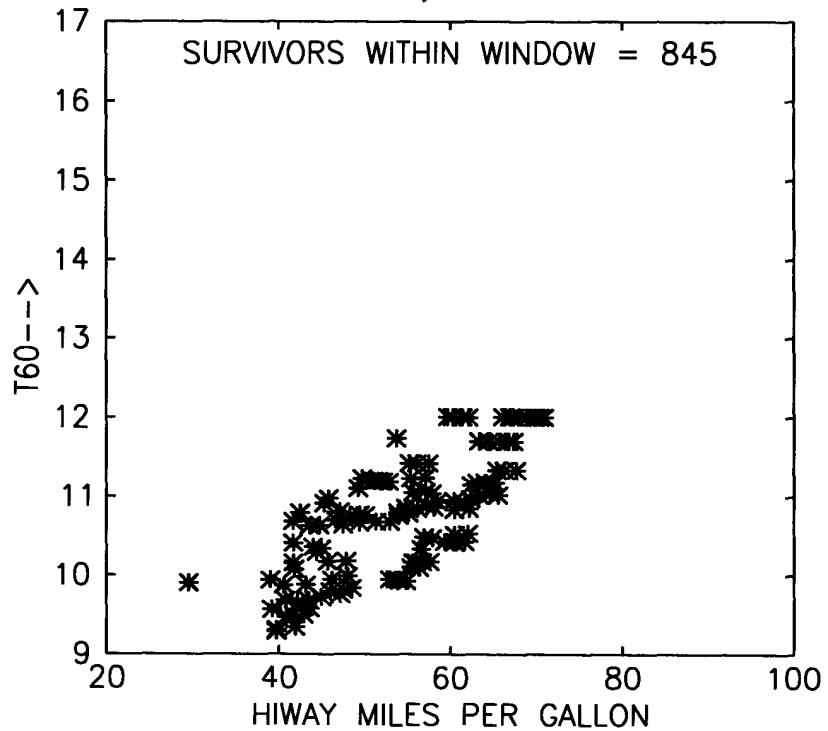


FIG-4E

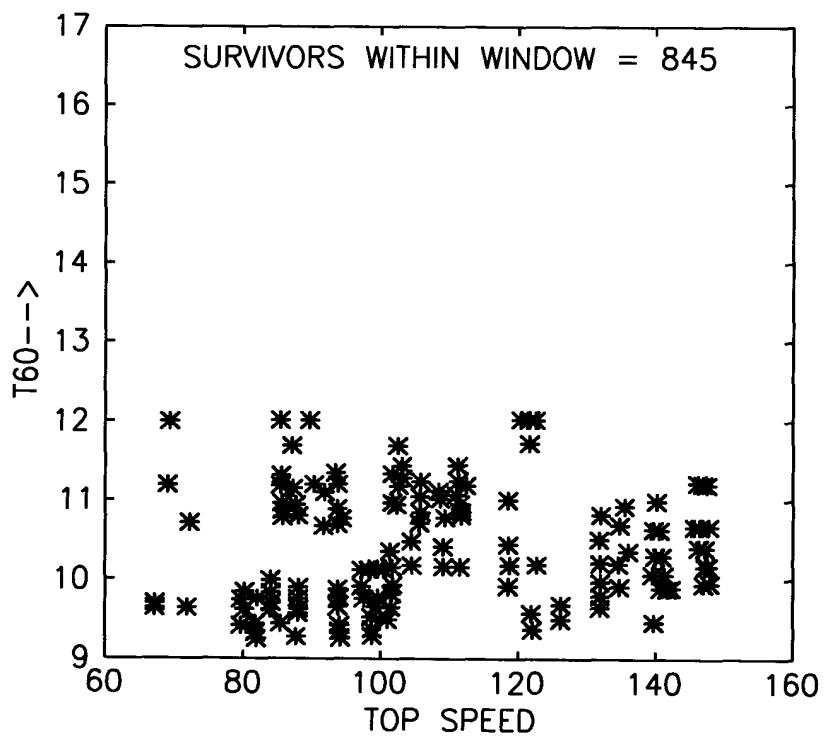


FIG-4F

REPLACEMENT SHEET

6/25

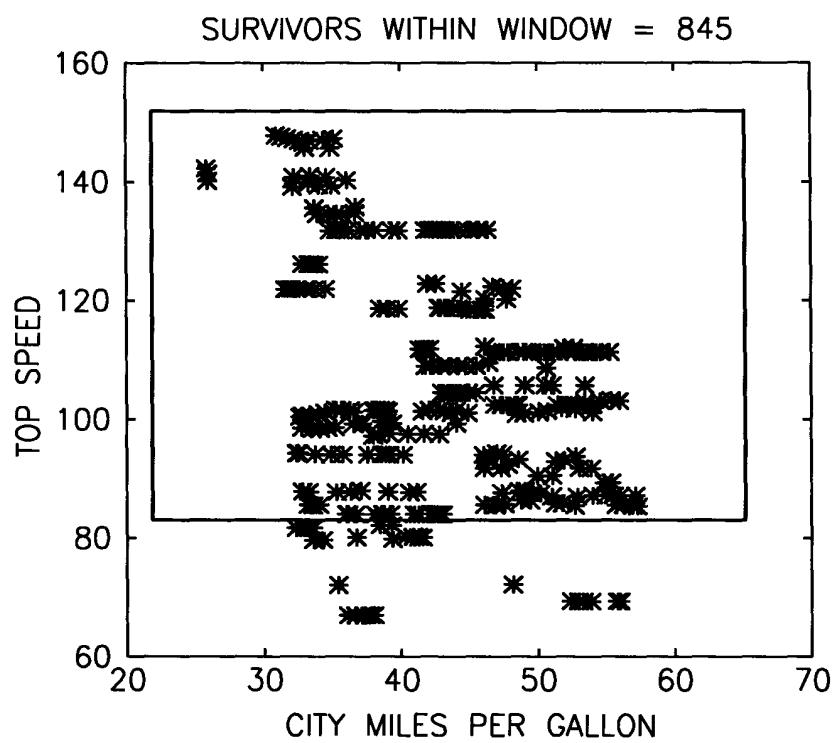


FIG-5

REPLACEMENT SHEET

7/25

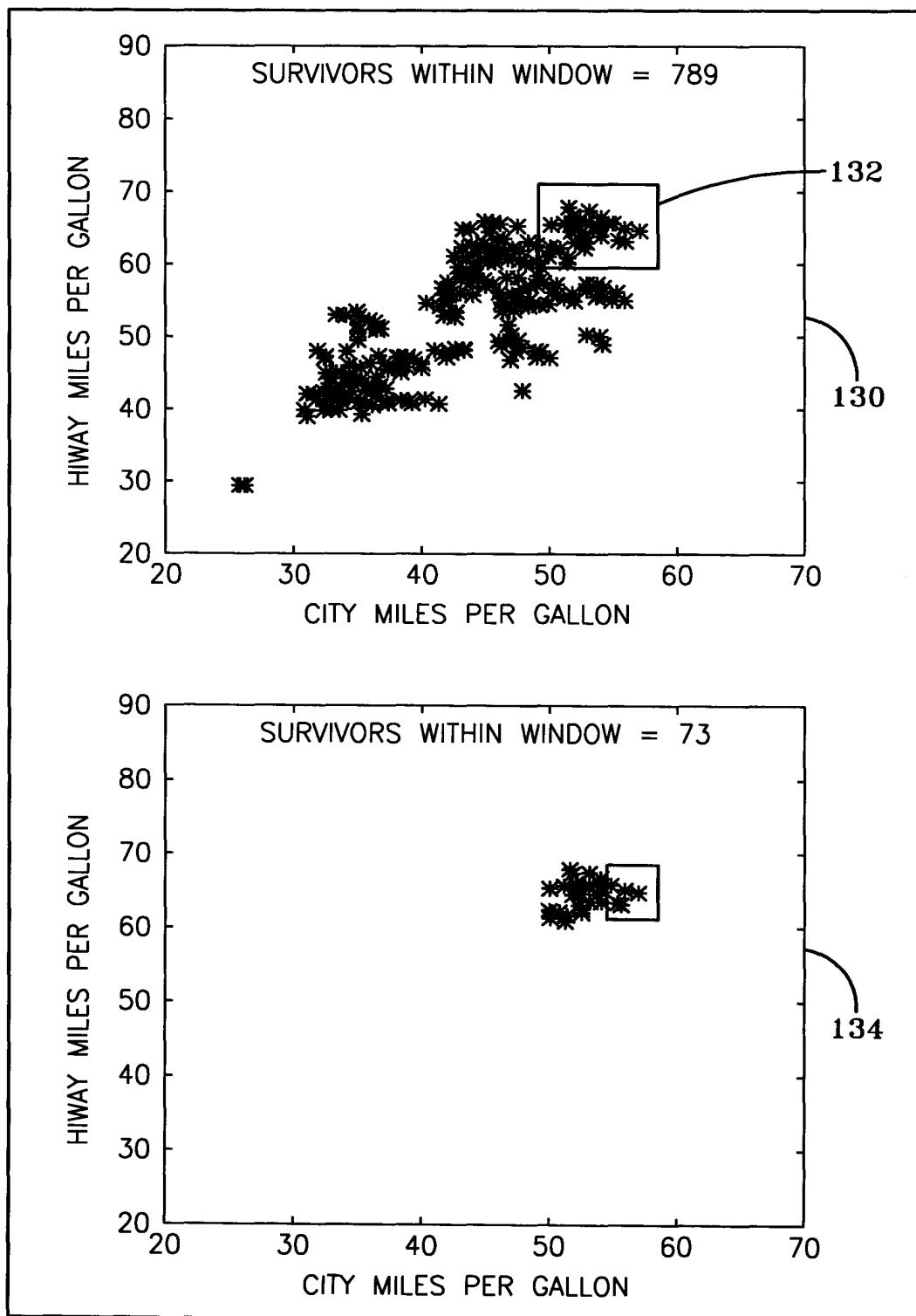


FIG-6

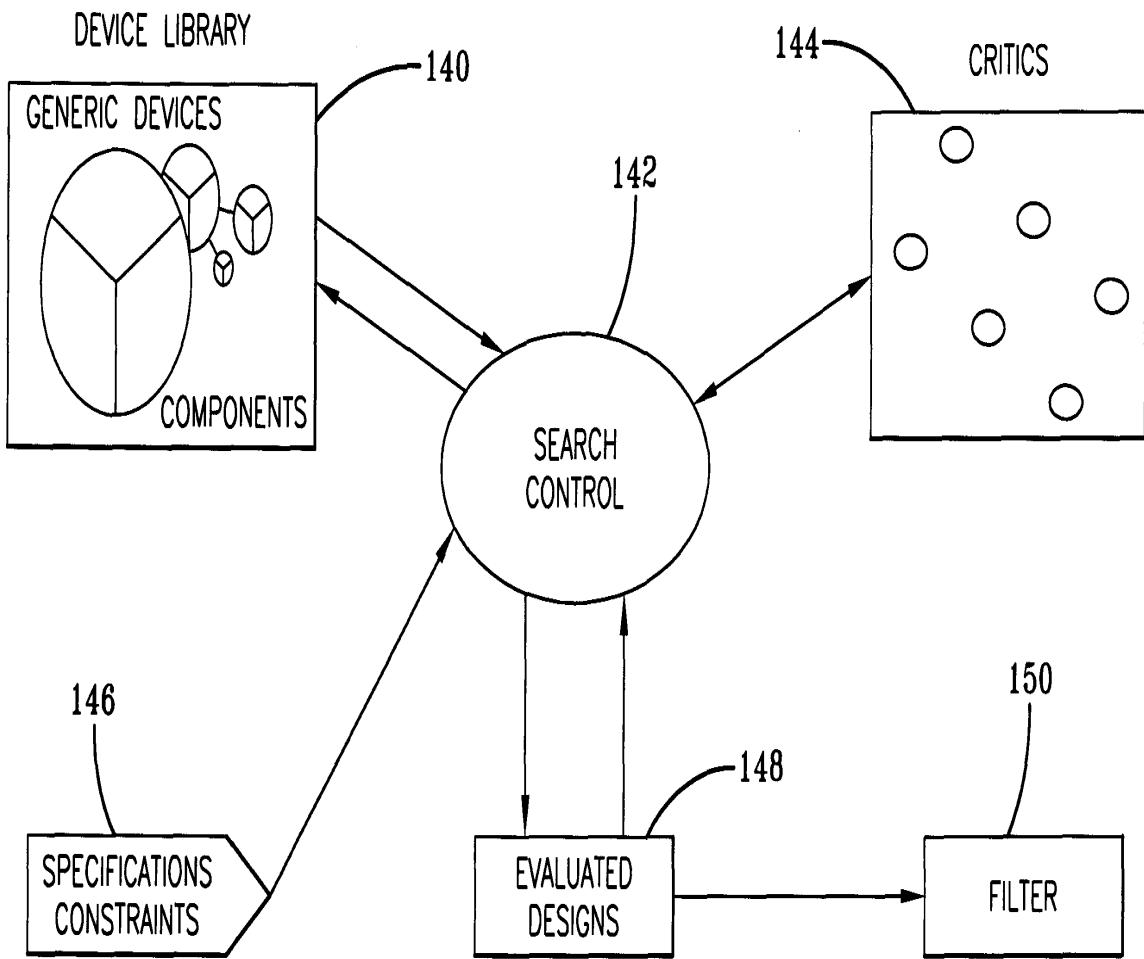


FIG-7

## FIG-8

160

Entity: 15gal\_tank

quantities:

volume: float

density: float

flow\_rate: float

behaviors:

 $(time = 0) \Rightarrow volume = 15/264 \text{ m}^3$ 

% 15-gallon tank

 $\text{diff}(volume) = - \text{flow\_rate}$ density = 0.00078 kg/m<sup>3</sup>

% Diesel Fuel

162

Entity vw19

quantities:

torque: float

speed: float

efficiency: float

BSFC: float

behaviors:

 $T_w_{vw19}[speed] * \text{driver.throttle\_angle}$ 

= torque

 $\text{efficiency}_{vw19}[\text{torque}, \text{speed}]$ 

= efficiency

BSFC\_map[torque,speed\*30/pi]

= BSFC % in gram/kW-hr

Relation transmission\_diffgear

participants:

transmission: 5\_speed\_manual

diffgear: diffgear4\_6

behavior:

transmission.torque\_out = diffgear.torque\_in

transmission.speed\_out = diffgear.speed\_in

% All losses from output shaft of ICE to wheel % are accounted for in the transmission

% efficiency

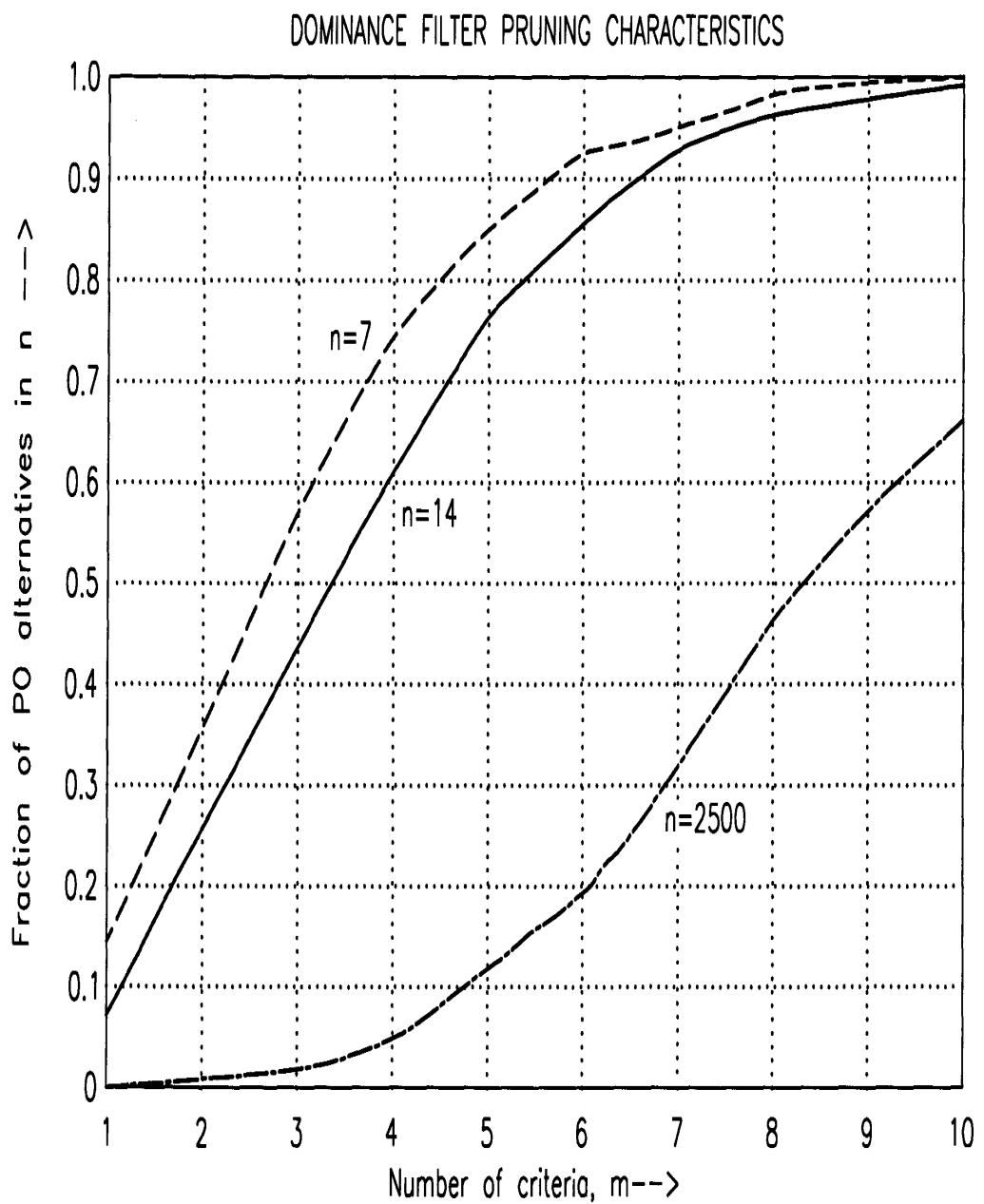
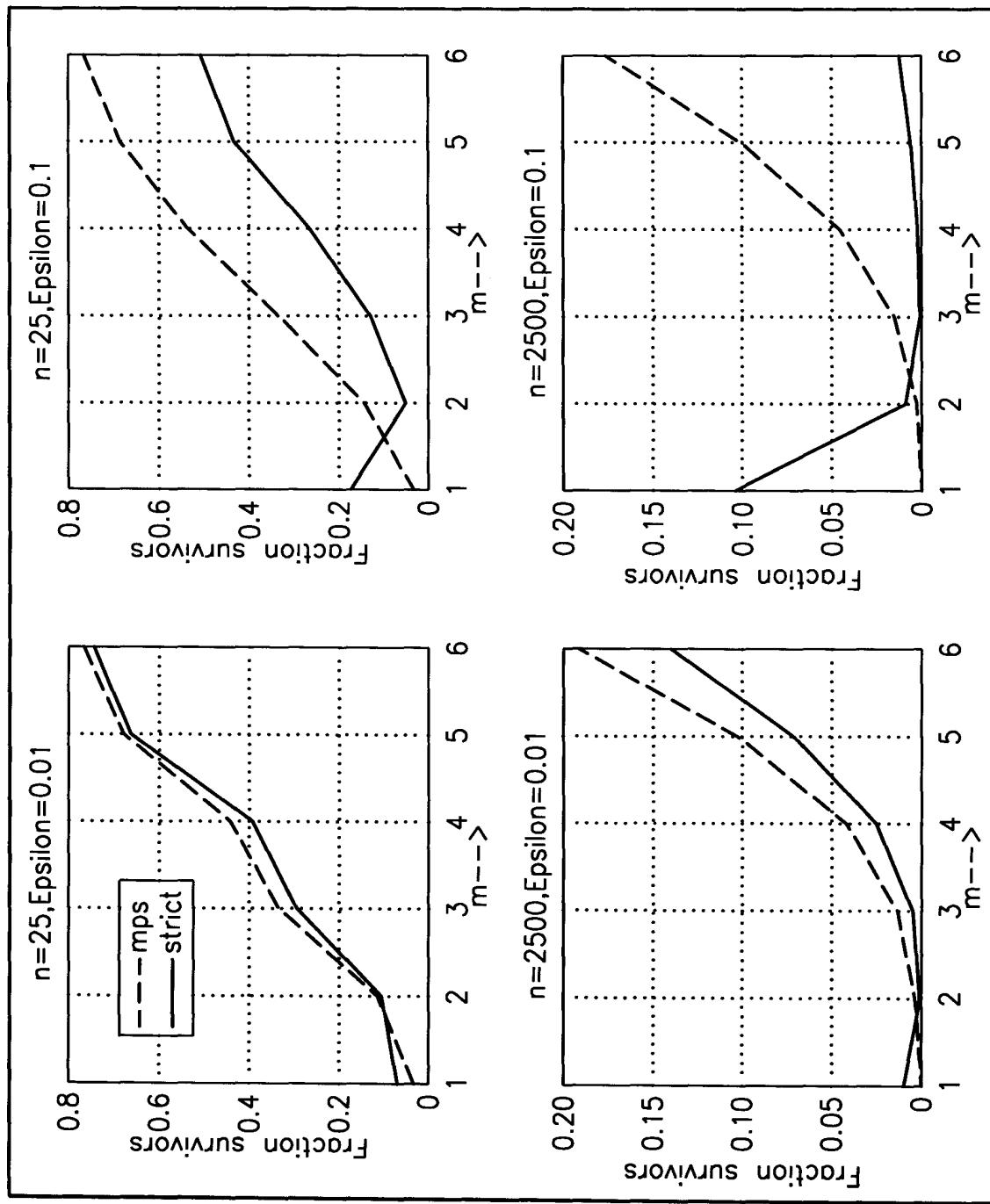
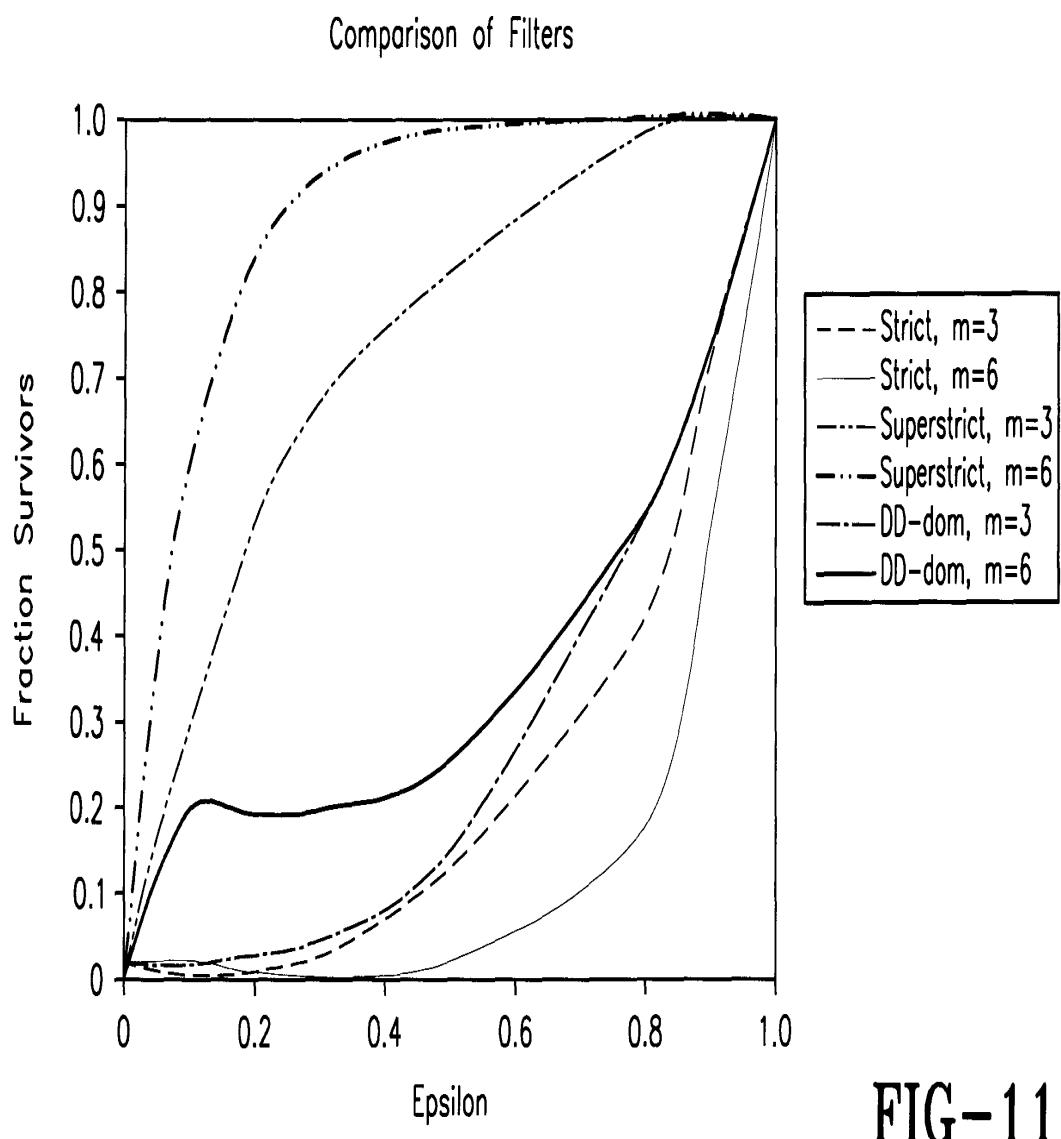


FIG-9

11/25

FIG-10





**FIG-11**

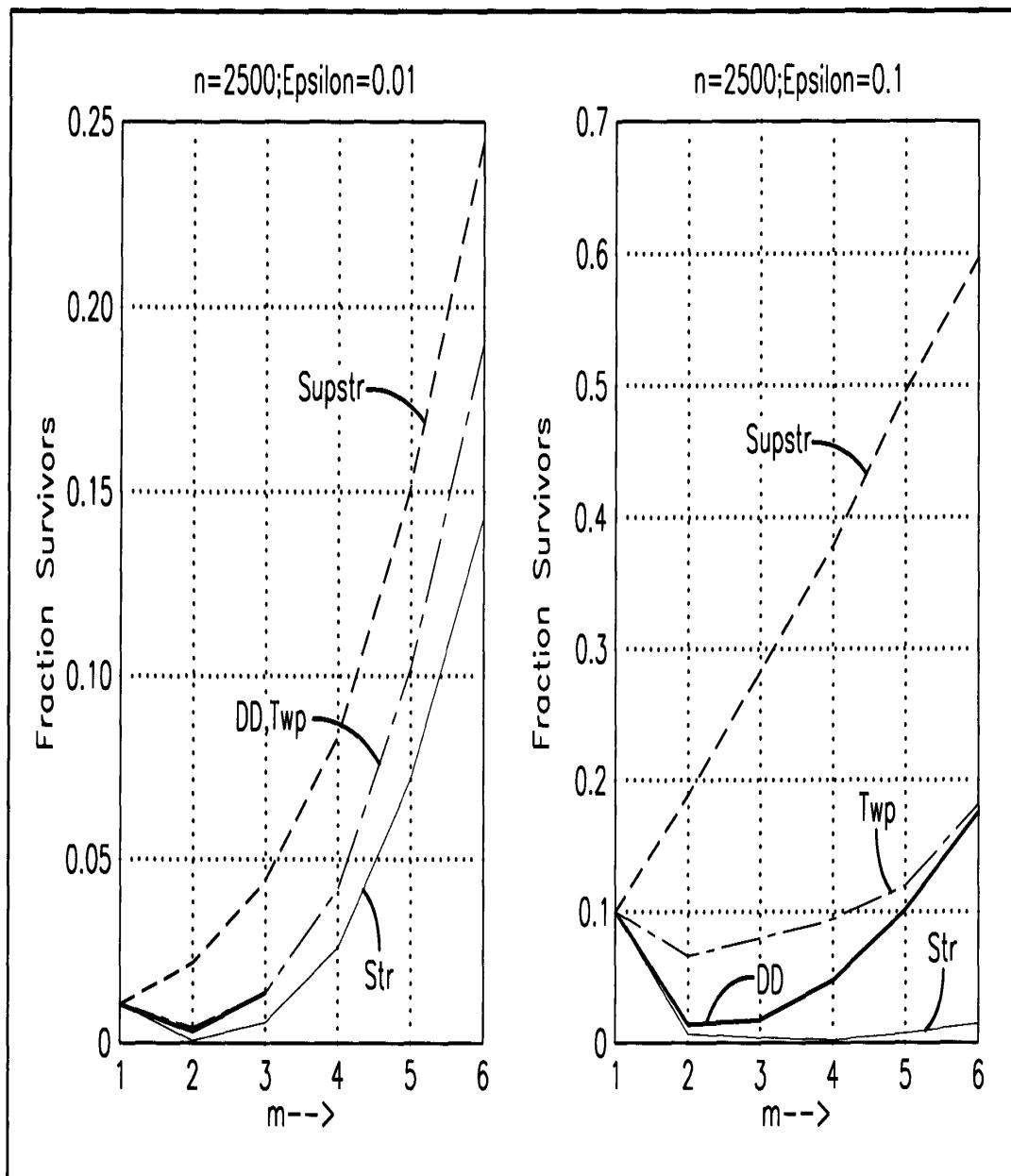
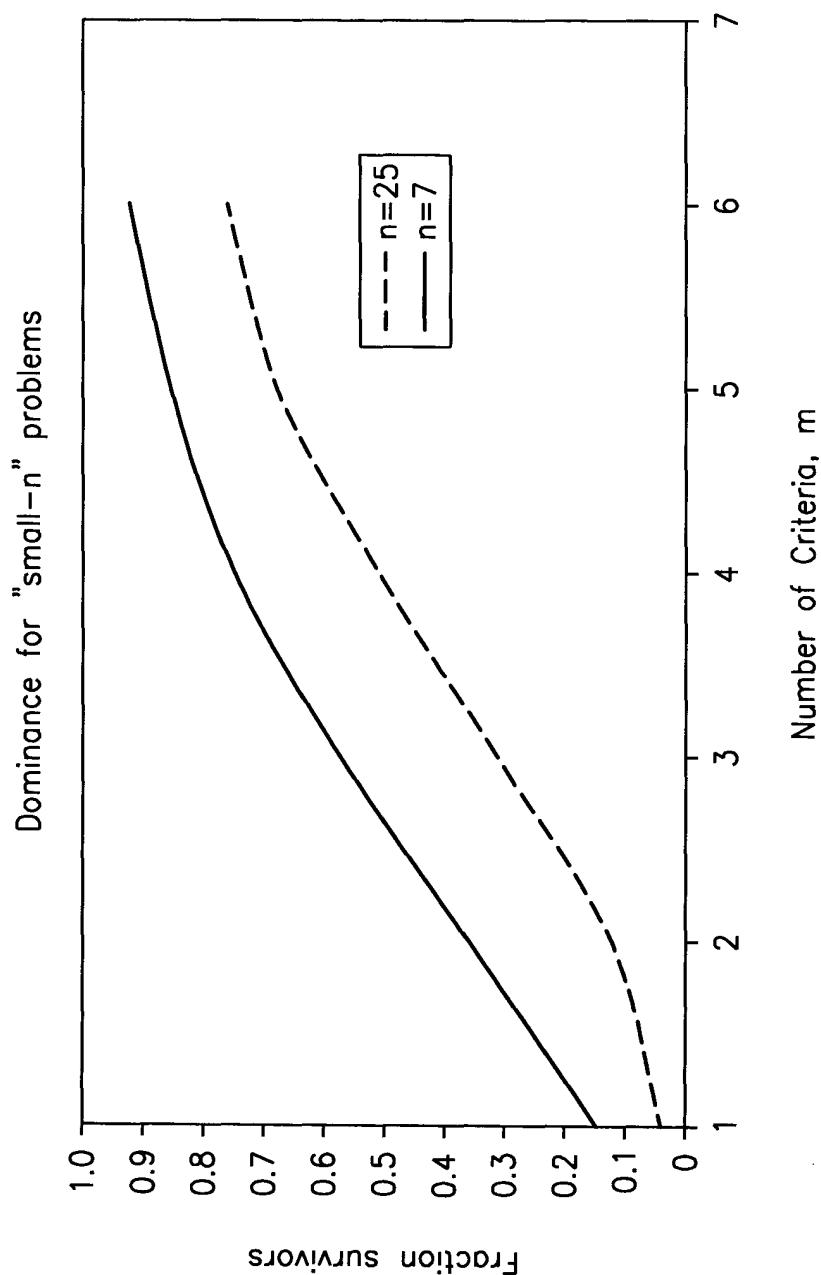


FIG-12



**FIG-13**

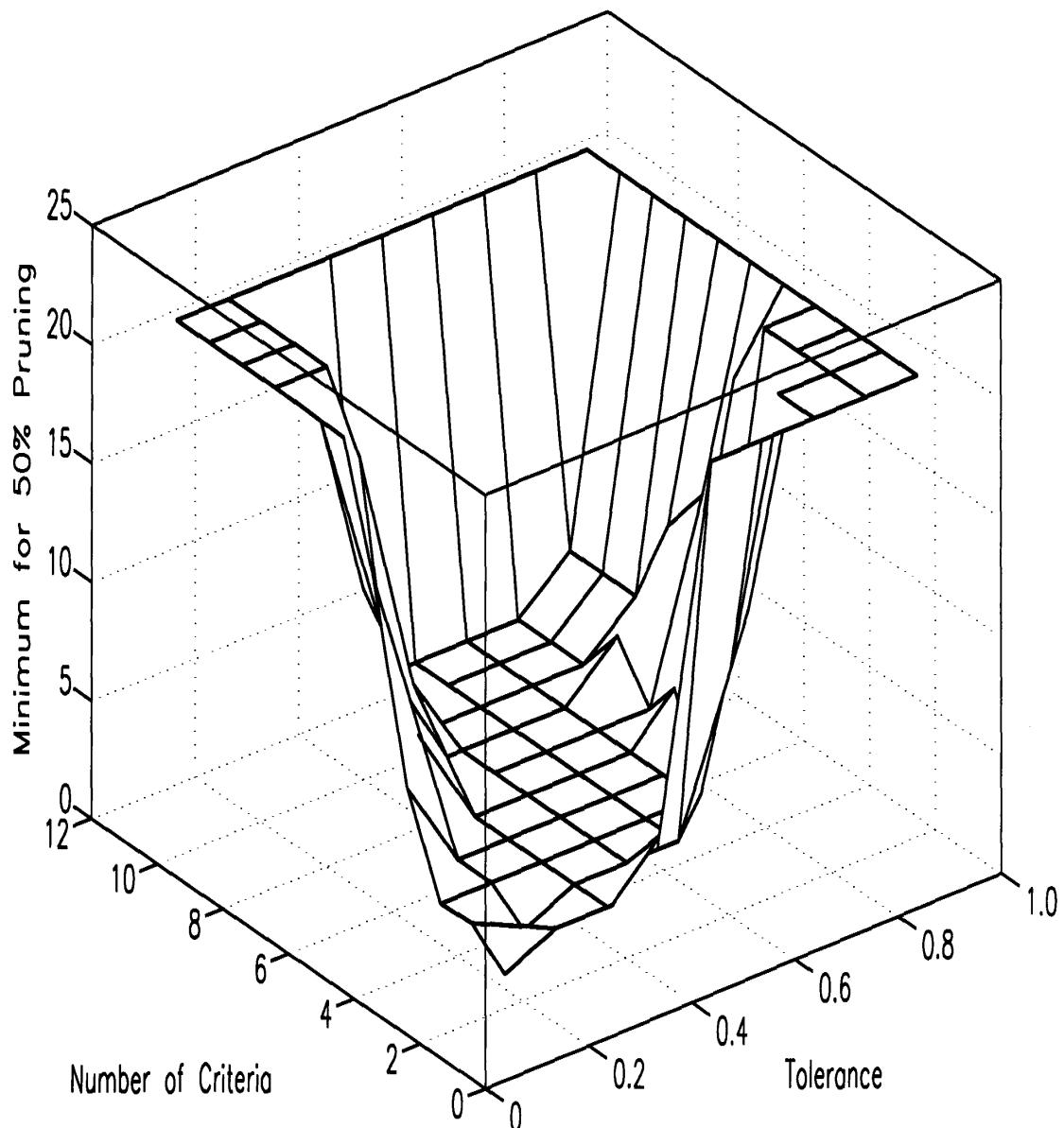
Basin of Goodness for Strict dominance for  $n \leq 20$  problems with 50% Pruning

FIG-14

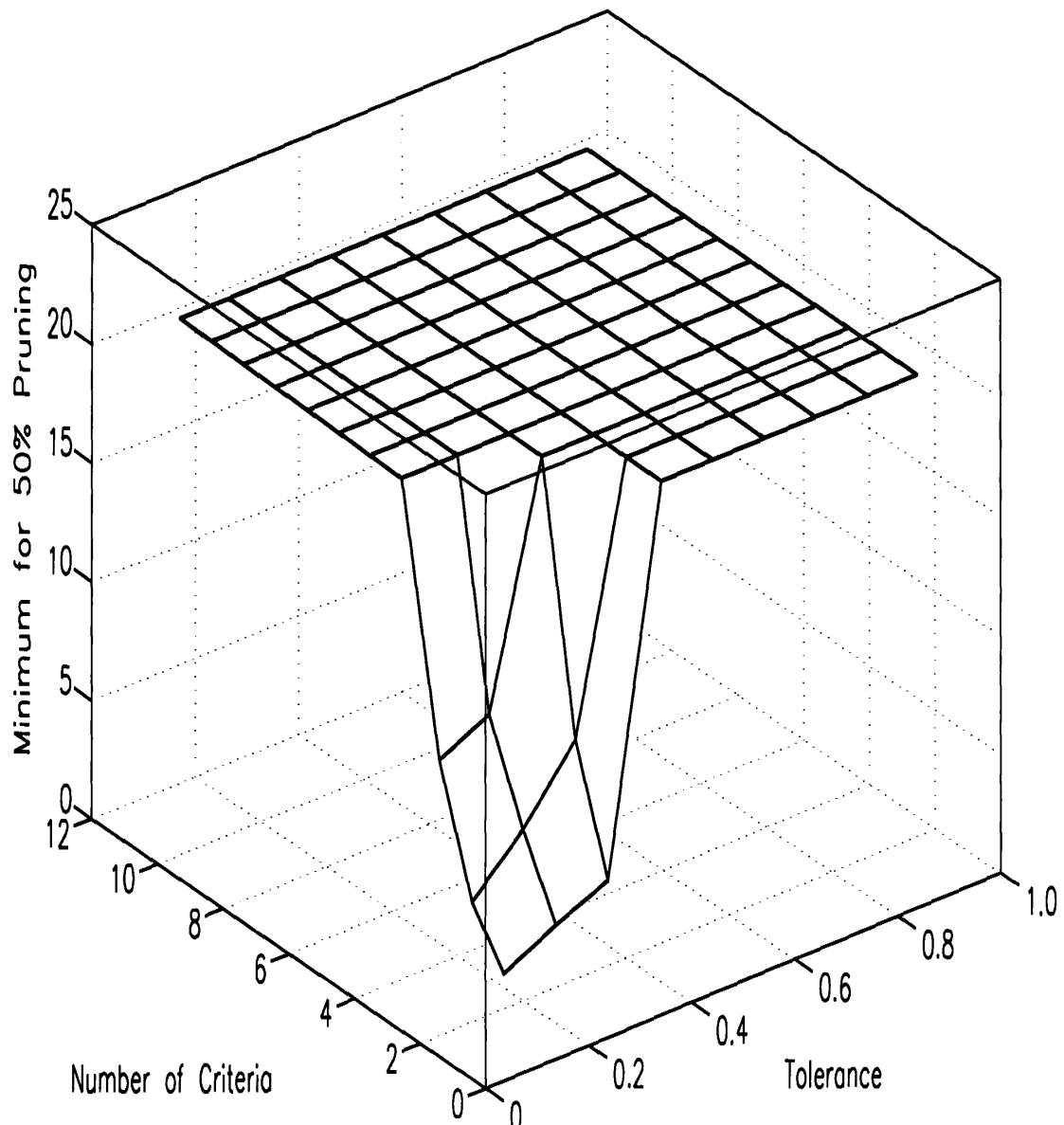
Basin of Goodness for twopass filter for  $n \leq 20$  problems with 50% Pruning

FIG-15

REPLACEMENT SHEET

17/25

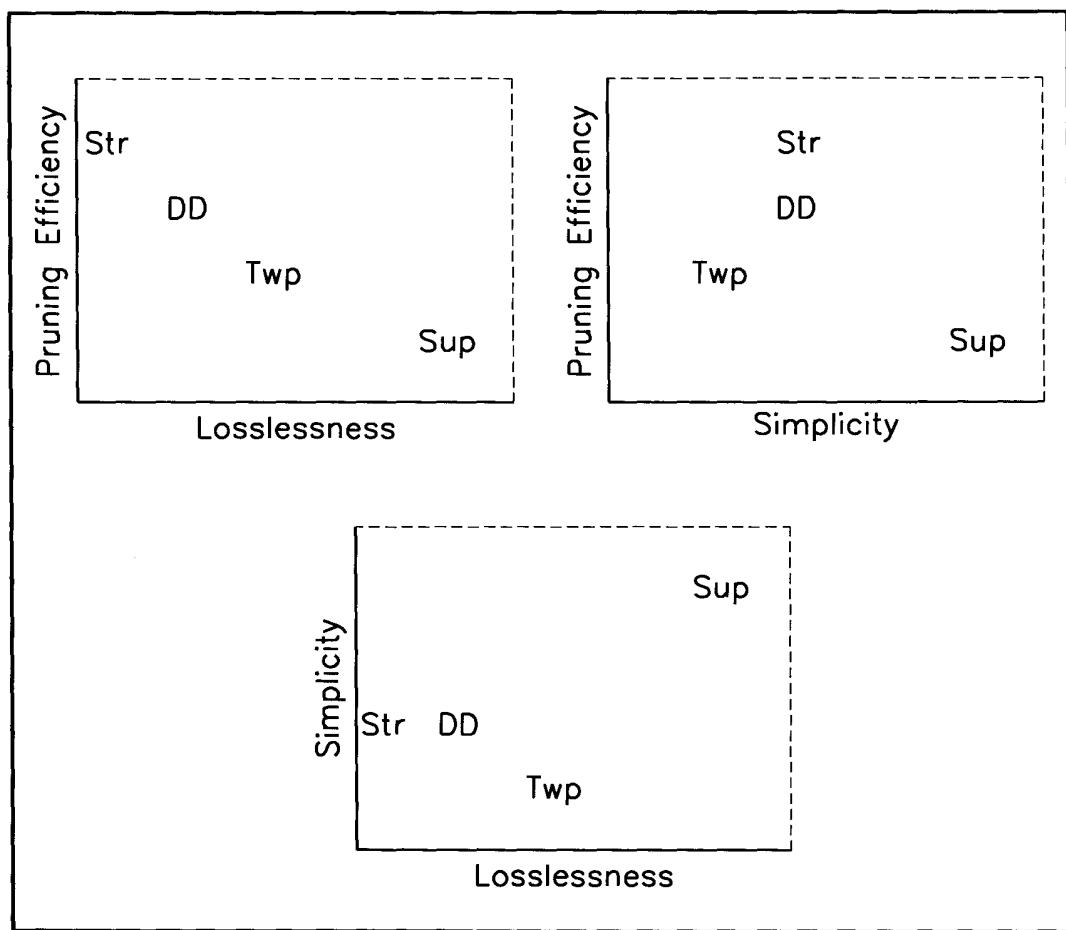


FIG-16

REPLACEMENT SHEET

18/25

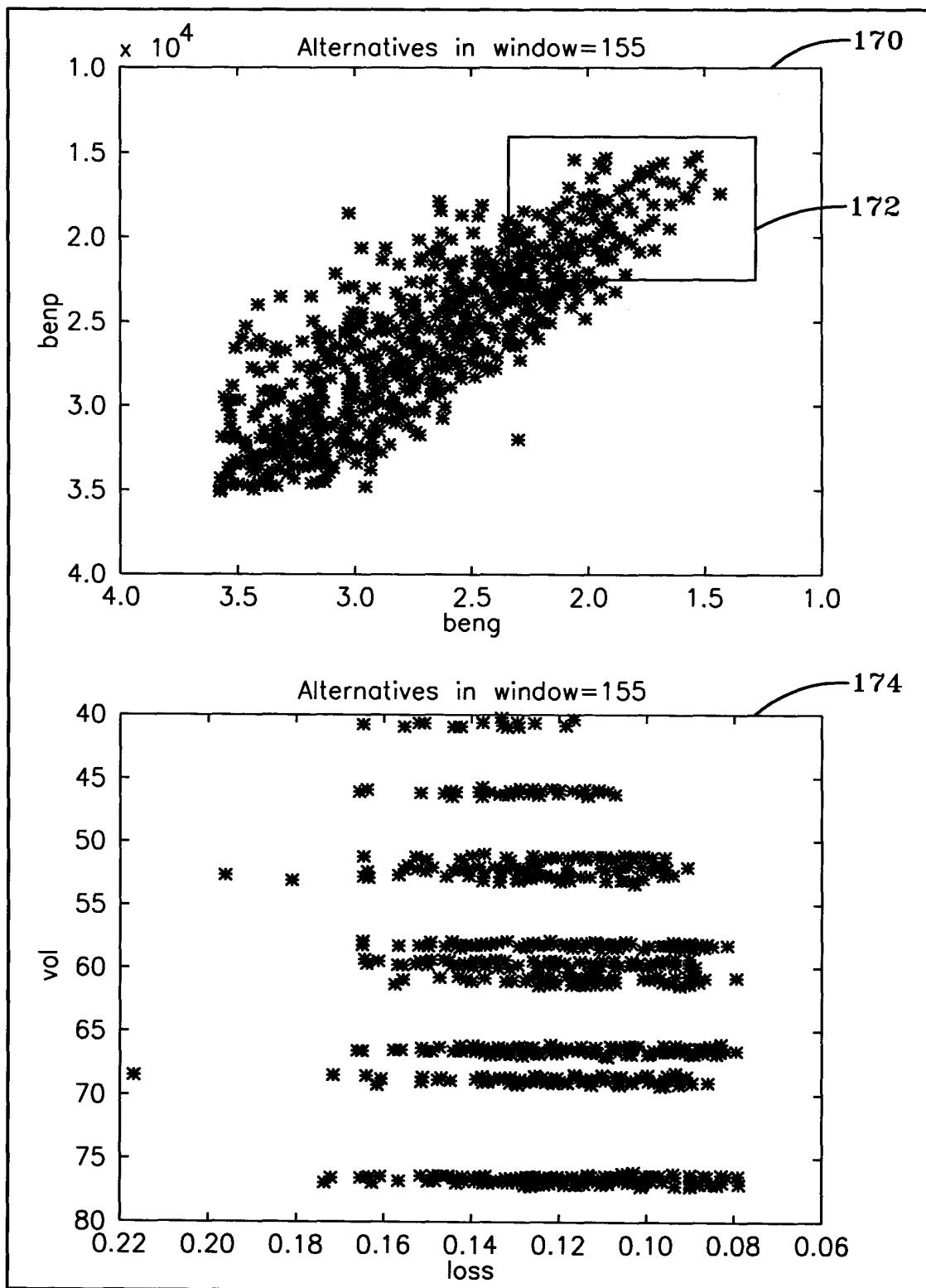


FIG-17

REPLACEMENT SHEET

19/25

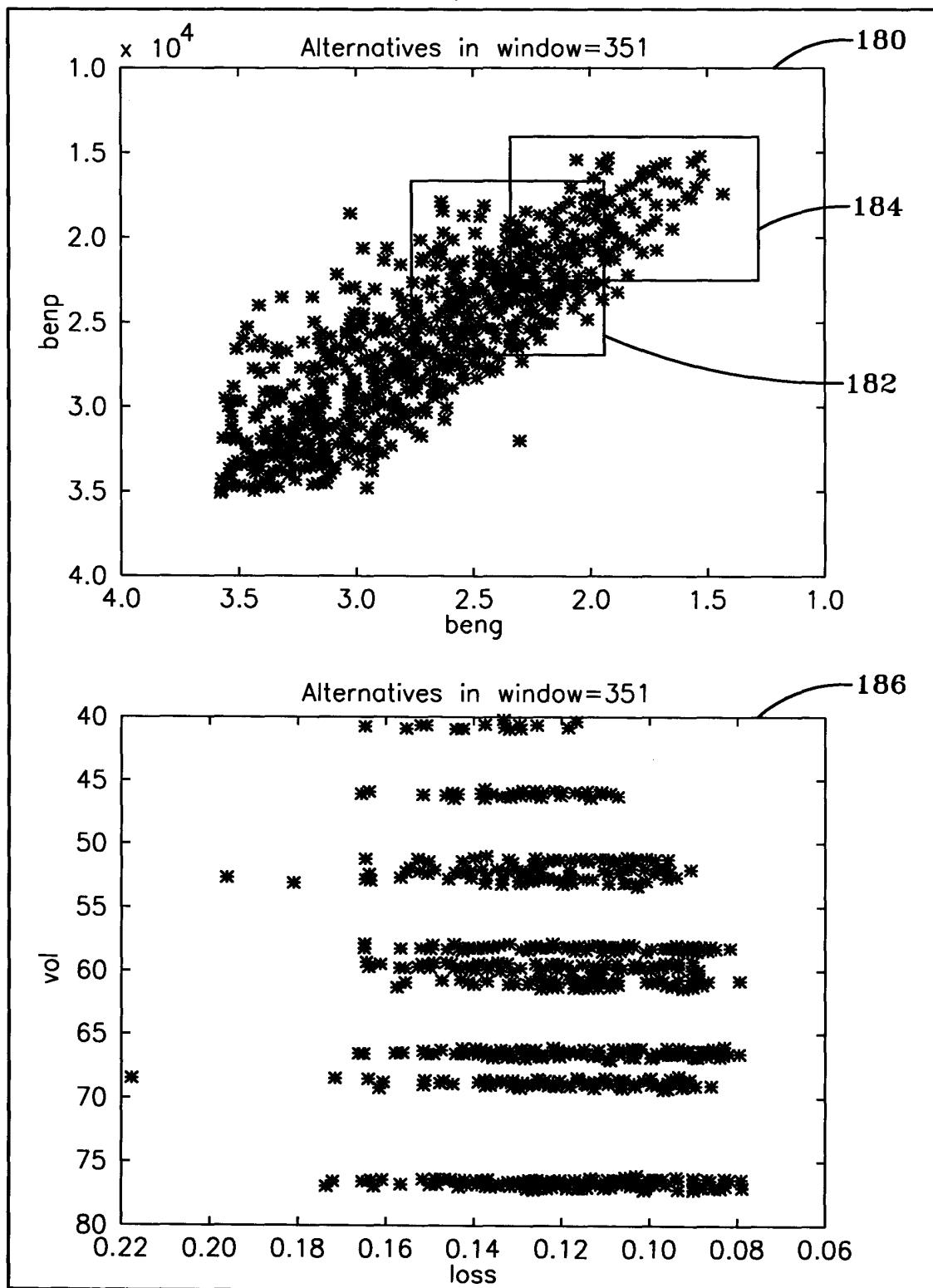


FIG-18

REPLACEMENT SHEET

20/25

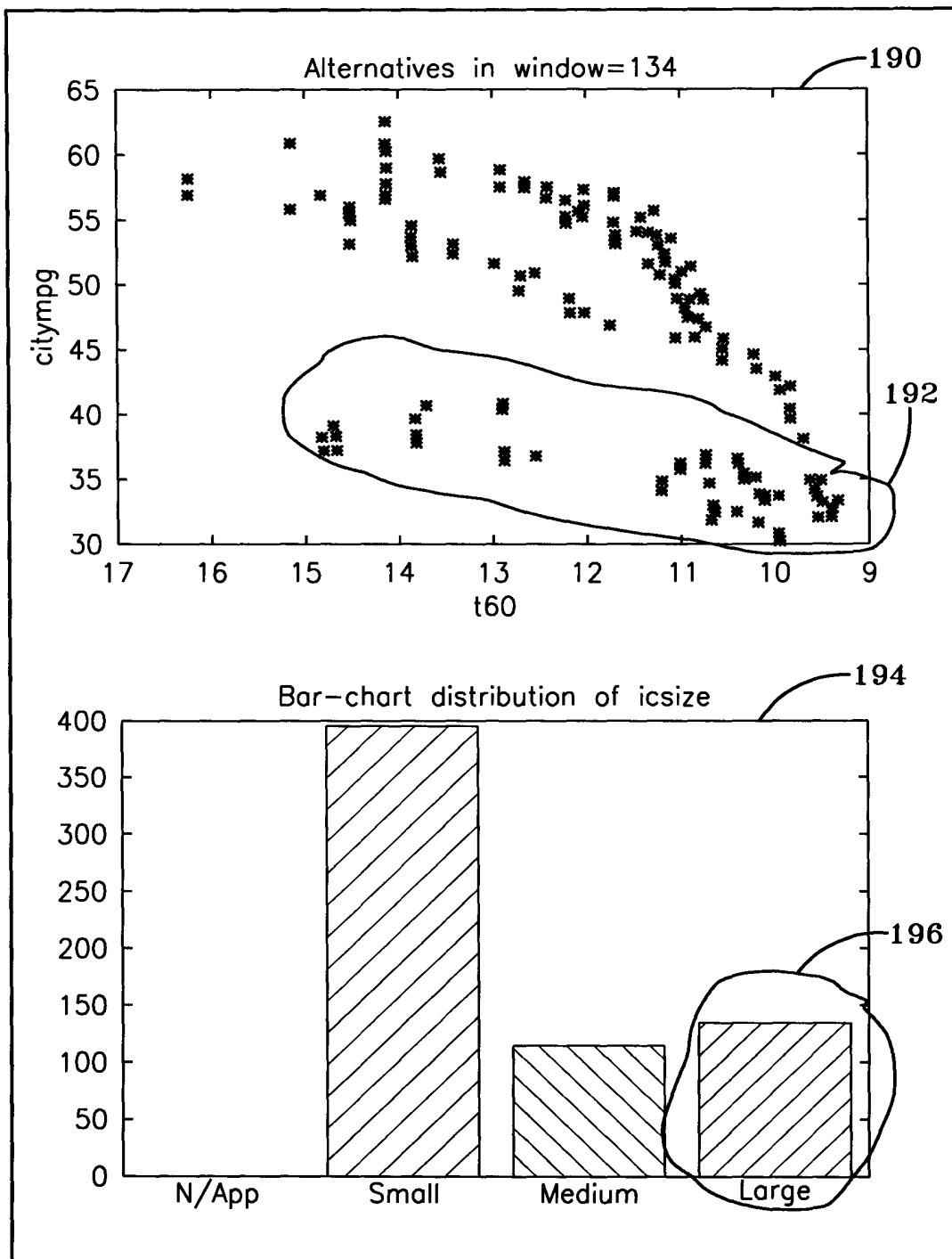


FIG-19

REPLACEMENT SHEET

21/25

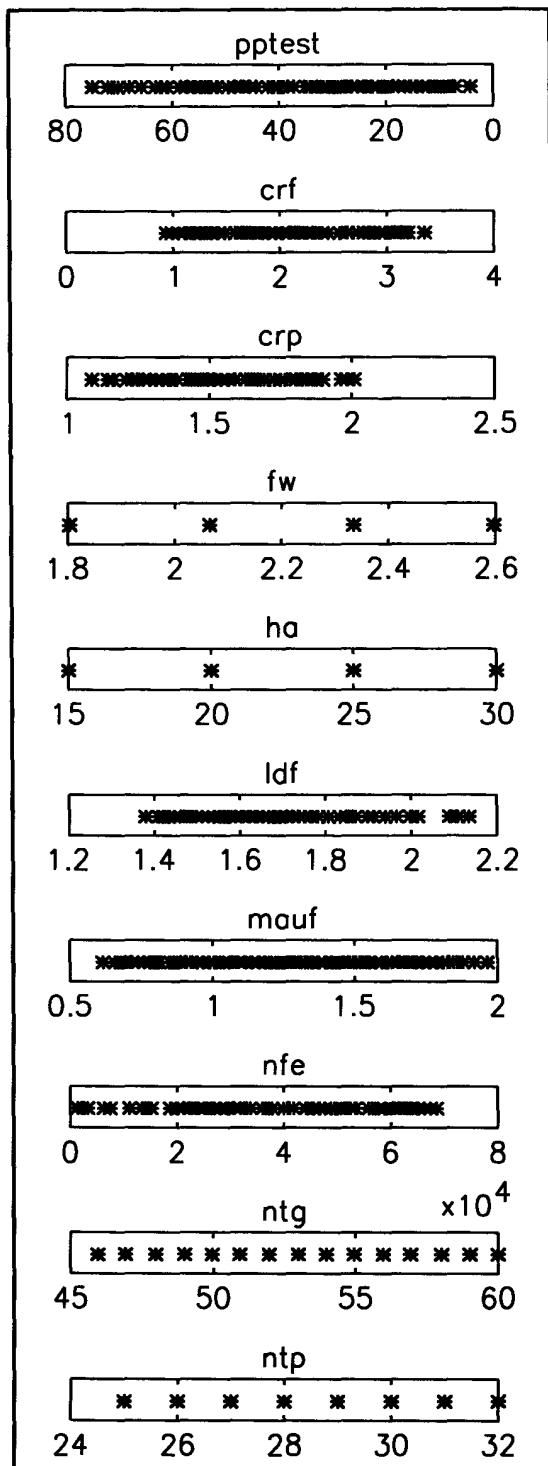
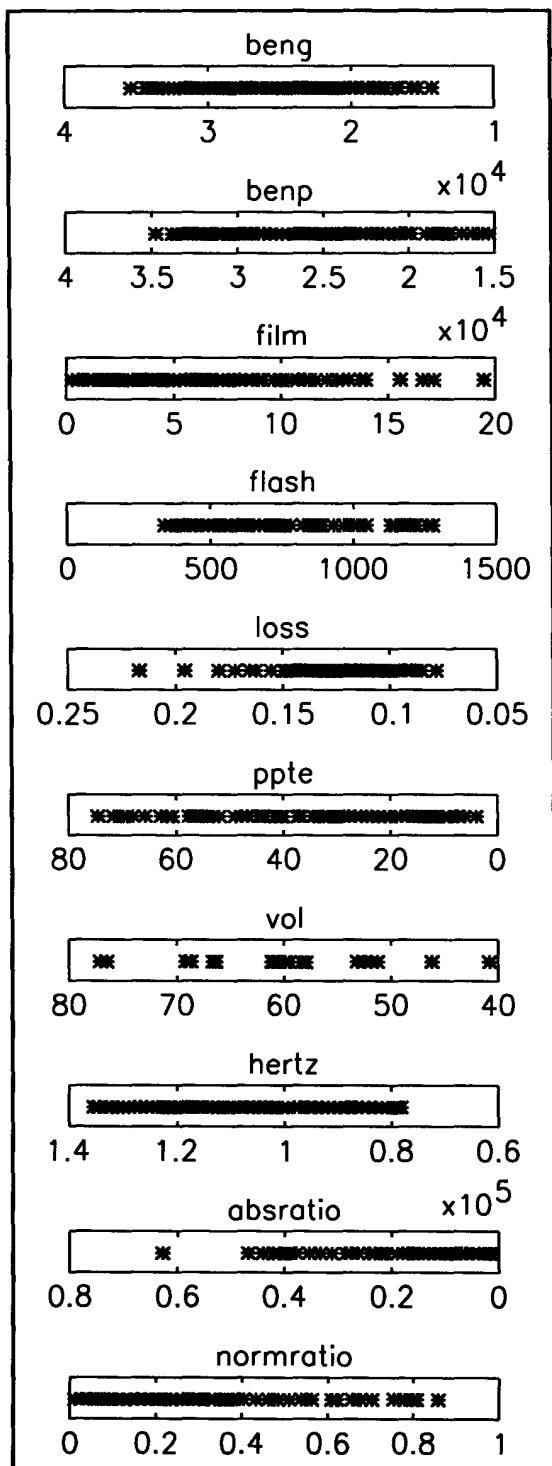


FIG-20A

FIG-20B

REPLACEMENT SHEET

22/25

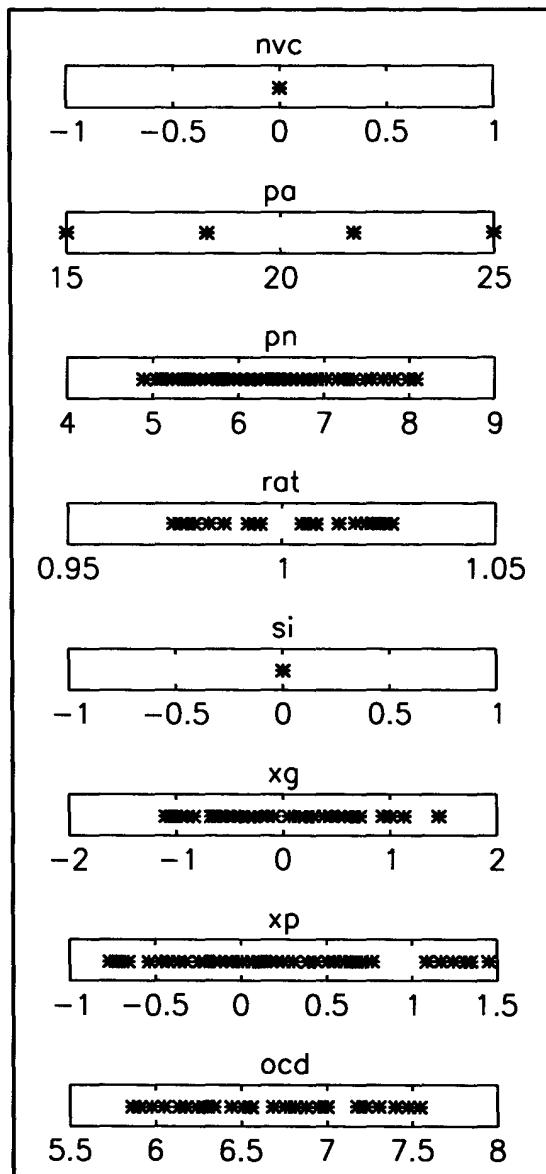


FIG-20C

REPLACEMENT SHEET

23/25

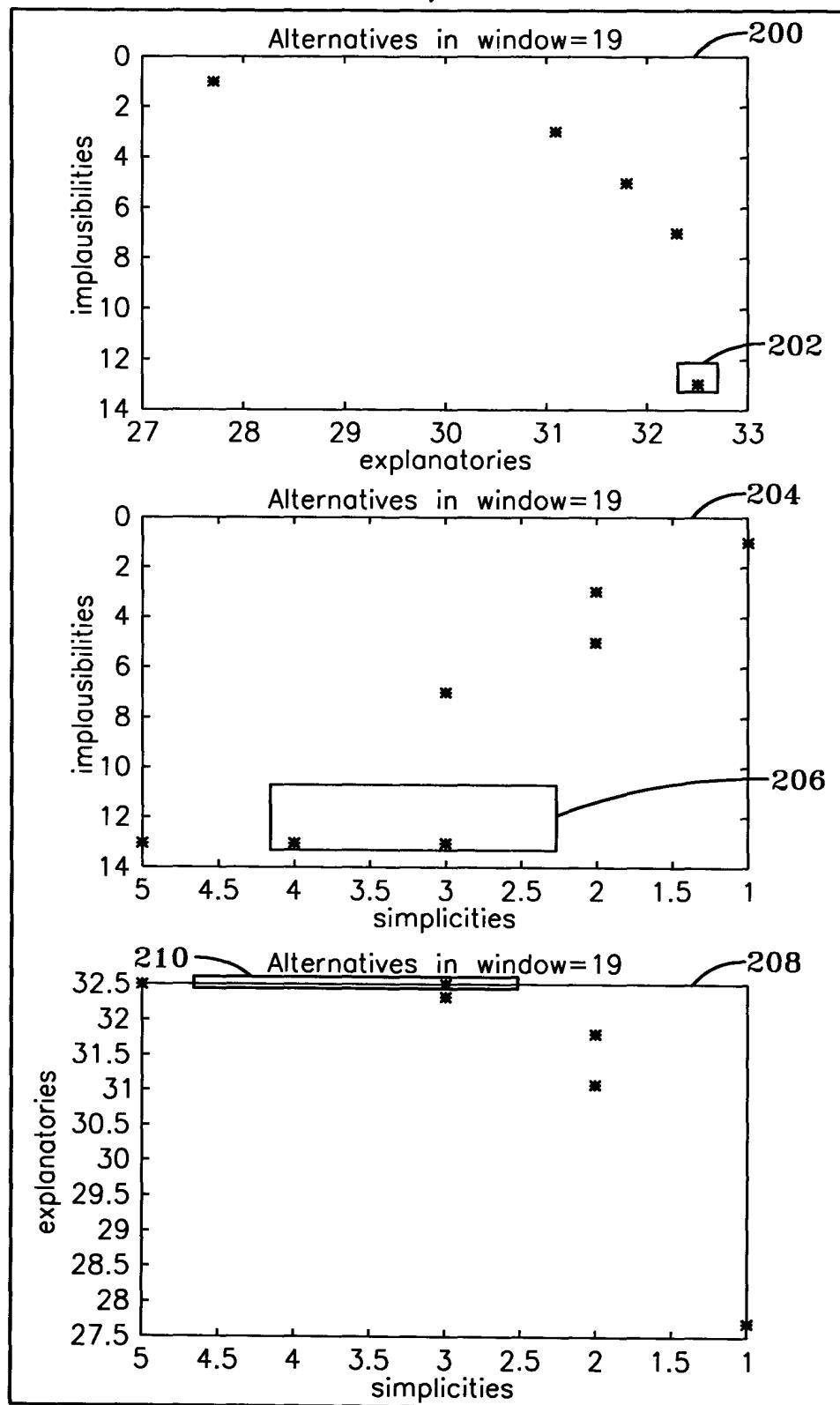
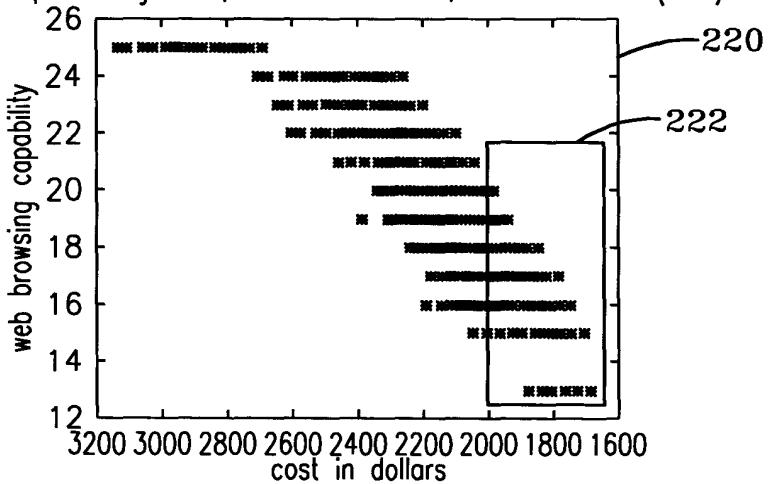


FIG-21

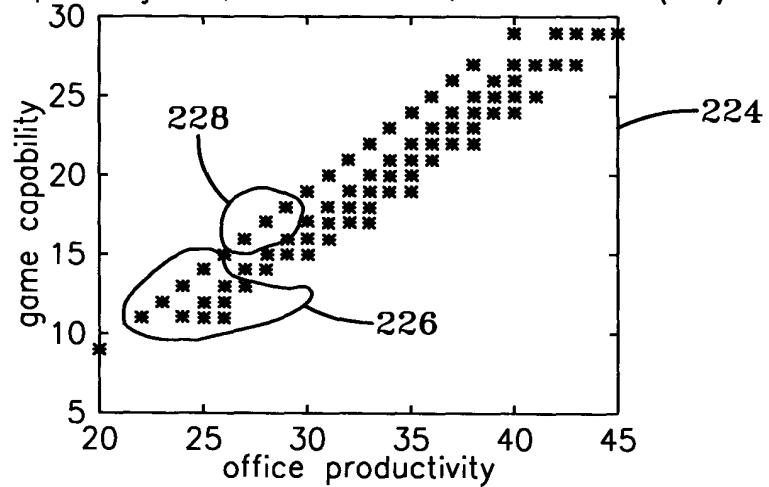
REPLACEMENT SHEET

24/25

Domain-Computer configurations; Total alternatives-8640; Dominance survivors(below)-347



Domain-Computer configurations; Total alternatives-8640; Dominance survivors(below)-347



Domain-Computer configurations; Total alternatives-8640; Dominance survivors(below)-347

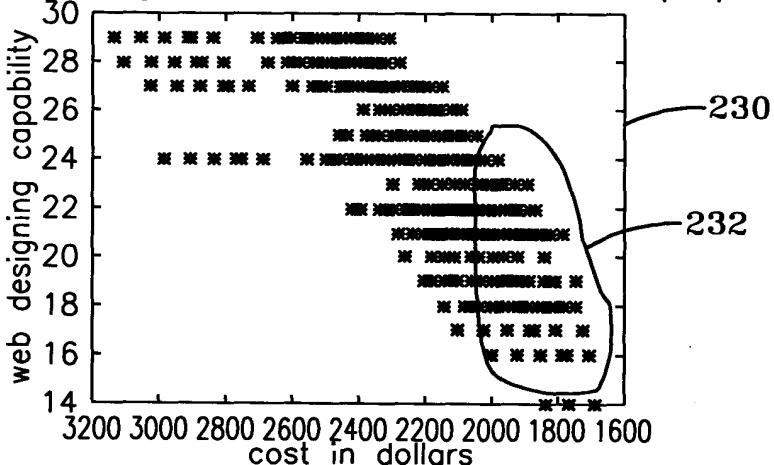


FIG-22

REPLACEMENT SHEET

25/25

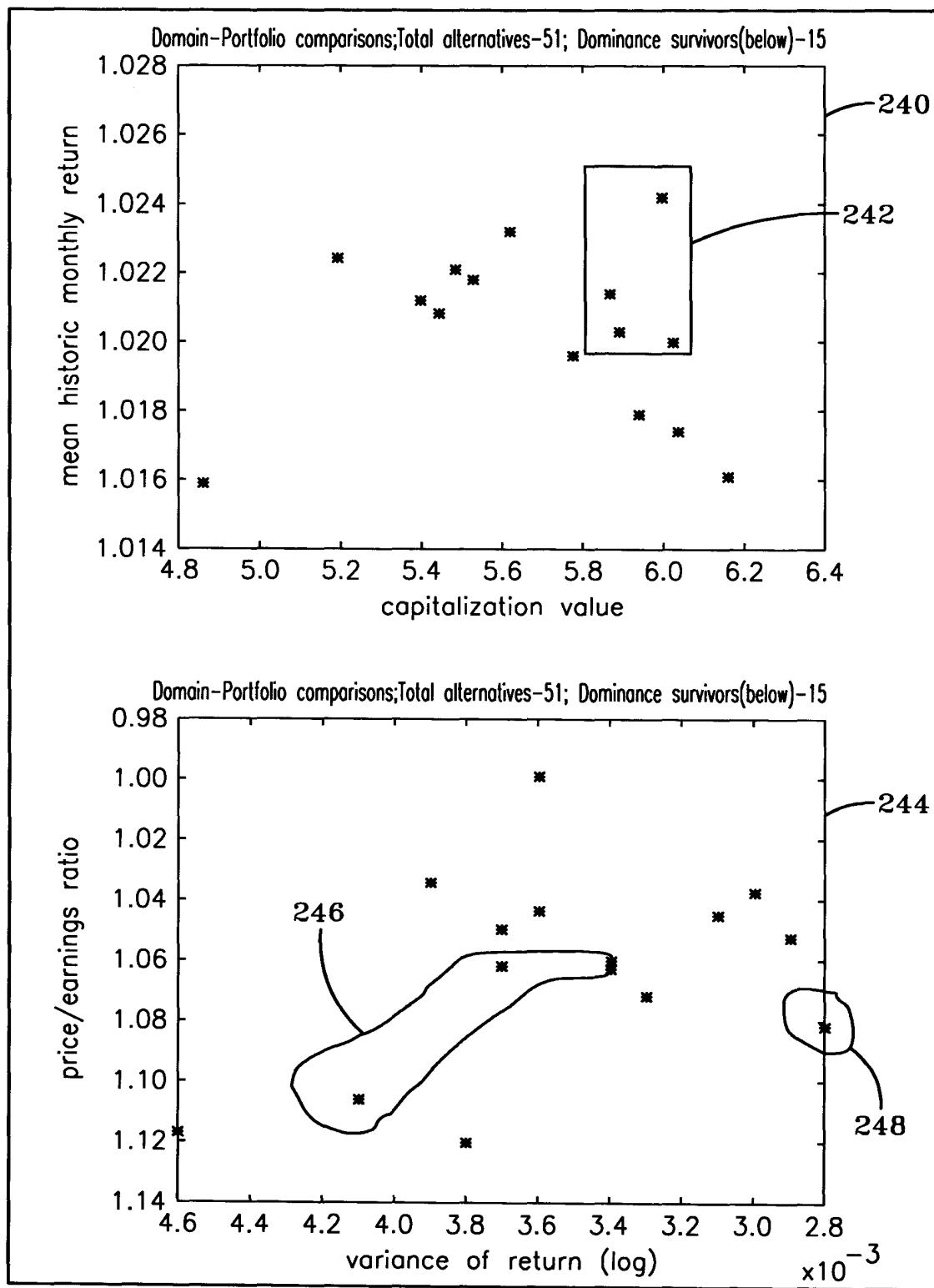


FIG-23